

WHAT IS CLAIMED IS:

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1. An Internet facsimile gateway device connected to a telecommunication network and the Internet, comprising;

10 an image-information transmitting unit that transmits image information included in an electronic mail message to a facsimile device when said Internet facsimile gateway device receives said electronic mail message requesting image-information transmission to the facsimile device;

15 a delivery-confirmation-mail creating unit that creates a delivery-confirmation mail message notifying a result of the image-information transmission after the image-information transmission by said Internet facsimile gateway device is completed, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message to an original address of said electronic mail message; and

25 a delivery-confirmation-mail transmitting unit that transmits the delivery-confirmation mail message to

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the original address of said electronic mail message.

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2. The Internet facsimile gateway device as
claimed in claim 1, wherein:

the delivery-confirmation mail message is
regulated by a DSN; and

10 the delivery-confirmation-mail creating unit
creates the delivery-confirmation mail message regulated
by the DSN notifying a successful image transmission
after the image-information transmission by said
Internet facsimile gateway device is succeeded, if said
15 electronic mail message requests said Internet facsimile
gateway device to transmit the delivery-confirmation
mail message regulated by the DSN notifying the
successful image transmission to the original address of
said electronic mail message.

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3. The Internet facsimile gateway device as
25 claimed in claim 1, wherein:

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the delivery-confirmation mail message is
regulated by the DSN; and

the delivery-confirmation-mail creating unit
that creates the delivery-confirmation mail message
5 regulated by the DSN notifying a failed image
transmission after the image-information transmission by
said Internet facsimile gateway device is failed, if
said electronic mail message requests said Internet
facsimile gateway device to transmit the delivery-
10 confirmation mail message regulated by the DSN notifying
the failed image transmission to the original address of
said electronic mail message.

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4. The Internet facsimile gateway device as
claimed in claim 1, wherein:

the delivery-confirmation mail message is
20 regulated by a MDN; and
the delivery-confirmation-mail creating unit
that creates the delivery-confirmation mail message
regulated by the MDN notifying the successful image
transmission after the image-information transmission by
25 said Internet facsimile gateway device is succeeded, if

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said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the successful image transmission to the original
5 address of said electronic mail message.

10 5. The Internet facsimile gateway device as claimed in claim 1, wherein:
 the delivery-confirmation mail message is regulated by the MDN; and
 the delivery-confirmation-mail creating unit
15 creates the delivery-confirmation mail message regulated by the MDN notifying the failed image transmission after the image-information transmission by said Internet facsimile gateway device is failed, if said electronic mail message requests said Internet facsimile gateway
20 device to transmit the delivery-confirmation mail message regulated by the MDN notifying the failed image transmission to the original address of said electronic mail message.

6. The Internet facsimile gateway device as
claimed in claim 1, wherein the delivery-confirmation
mail message further comprising a first extension field
that indicates a total number of pages transmitted to
5 the facsimile device.

10 7. The Internet facsimile gateway device as
claimed in claim 1, wherein the delivery-confirmation
mail message further comprising a second extension field
that indicates a communication charge for transmitting
the image information to the facsimile device.

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8. The Internet facsimile gateway device as
20 claimed in claim 1, wherein the delivery-confirmation
mail message further comprising a third extension field
that indicates a time at which the image-information
transmission is completed.

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9. The Internet facsimile gateway device as claimed in claim 1, wherein the telecommunication network is a general switched telephone network GSTN.

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10. The Internet facsimile gateway device as claimed in claim 1, wherein the telecommunication network is an analog public network PSTN, and the facsimile device is a G3 facsimile device.

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11. The Internet facsimile gateway device as claimed in claim 1, wherein the telecommunication network is an integrated services digital network ISDN, and the facsimile device is a G4 facsimile device.

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12. The Internet facsimile gateway device as
25 claimed in claim 1, wherein said delivery-confirmation-

mail creating unit creates the delivery-confirmation
mail message that notifies the result of the image-
information transmission, said result including
reception ability information of the facsimile device
5 received therefrom, after the image-information
transmission by said Internet facsimile gateway device
is completed if said electronic mail message requests
said Internet facsimile gateway device to transmit the
delivery-confirmation mail message to the original
10 address of said electronic mail message.

15 13. The Internet facsimile gateway device as
claimed in claim 12, wherein the telecommunication
network is an analog public network PSTN, and the
facsimile device is a G3 facsimile device.

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14. The Internet facsimile gateway device as
claimed in claim 13, wherein the reception ability
25 information of the G3 facsimile device is a content of a

signal DIS (Digital Identification Signal) notified therefrom.

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15. The Internet facsimile gateway device as
claimed in claim 13, wherein the reception ability
information of the G3 facsimile device is a content of a
10 signal NSF (Non-Standard Facilities) notified therefrom.

15 16. The Internet facsimile gateway device as
claimed in claim 13, wherein the reception ability
information of the G3 facsimile device is a content of a
signal JM notified therefrom.

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17. The Internet facsimile gateway device as
claimed in claim 13, wherein the reception ability
25 information of the G3 facsimile device is information

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about a function to connect to the Internet in a case
that the G3 facsimile device includes the function to
connect to the Internet.

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18. The Internet facsimile gateway device as
claimed in claim 17, wherein the reception ability
10 information of the G3 facsimile device includes a
content of a signal CSA notified therefrom.

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19. The Internet facsimile gateway device as
claimed in claim 12, wherein the telecommunication
network is an integrated services digital network ISDN,
and the facsimile device is a G4 facsimile device.

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20. The Internet facsimile gateway device as
25 claimed in claim 19, wherein the reception ability

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information of the G4 facsimile device is a content of a signal RDCLP notified therefrom.

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21. An Internet facsimile gateway device connected to a telecommunication network and the Internet, comprising:

10 an image-information transmitting unit that transmits image information included in an electronic mail message to a facsimile device when said Internet facsimile gateway device receives said electronic mail message requesting image-information transmission to the
15 facsimile device;

a first-delivery-confirmation-mail creating unit that creates a first delivery-confirmation mail message notifying a successful transmission of said electronic mail message to said facsimile device, after receiving said electronic mail message if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message to an original address of said electronic mail message;

25 a first-delivery-confirmation-mail

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transmitting unit that transmits the first delivery-confirmation mail message to the original address of said electronic mail message;

5 a second-delivery-confirmation-mail creating unit that creates a second delivery-confirmation mail message notifying a result of the image-information transmission by said Internet facsimile gateway device to the facsimile device after said image-information transmission; and

10 a second-delivery-confirmation-mail transmitting unit that transmits the second delivery-confirmation mail message to the original address of said electronic mail message.

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22. The Internet facsimile gateway device as claimed in claim 21, wherein:

20 the first delivery-confirmation mail message is regulated by a DSN;

 the second delivery-confirmation mail message is regulated by the DSN; and

25 the second-delivery-confirmation-mail creating unit creates the second delivery-confirmation mail

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message regulated by the DSN notifying a successful
image transmission after the image-information
transmission by said Internet facsimile gateway device
is succeeded, if said electronic mail message requests
5 said Internet facsimile gateway device to transmit the
delivery-confirmation mail message regulated by the DSN
notifying the successful image transmission to the
original address of said electronic mail message.

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23. The Internet facsimile gateway device as
claimed in claim 21, wherein:

15 the first delivery-confirmation mail message
is regulated by the DSN;

 the second delivery-confirmation mail message
is regulated by the DSN; and

 the second-delivery-confirmation-mail creating
20 unit that creates the second delivery-confirmation mail
message regulated by the DSN notifying a failed image
transmission after the image-information transmission by
said Internet facsimile gateway device is failed, if
said electronic mail message requests said Internet
25 facsimile gateway device to transmit the delivery-

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confirmation mail message regulated by the DSN notifying the failed image transmission to the original address of said electronic mail message.

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24. The Internet facsimile gateway device as claimed in claim 21, wherein:

10 the first delivery-confirmation mail message is regulated by a MDN;

 the second delivery-confirmation mail message is regulated by the MDN; and

 the second-delivery-confirmation-mail creating

15 unit that creates the second delivery-confirmation mail message regulated by the MDN notifying the successful image transmission after the image-information transmission by said Internet facsimile gateway device is succeeded, if said electronic mail message requests

20 said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the successful image transmission to the original address of said electronic mail message.

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25. The Internet facsimile gateway device as claimed in claim 21, wherein:

the first delivery-confirmation mail message
is regulated by the MDN;

the second-delivery-confirmation-mail creating unit creates the second delivery-confirmation mail message regulated by the MDN notifying the failed image transmission after the image-information transmission by said Internet facsimile gateway device is failed, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the failed image transmission to the original address of said electronic mail message.

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26. The Internet facsimile gateway device as claimed in claim 21, wherein the telecommunication network is a general switched telephone network GSTN.

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27. The Internet facsimile gateway device as claimed in claim 21, wherein the telecommunication network is an analog public network PSTN, and the facsimile device is a G3 facsimile device.

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28. The Internet facsimile gateway device as 10. claimed in claim 21, wherein the telecommunication network is an integrated services digital network ISDN, and the facsimile device is a G4 facsimile device.

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29. A method of controlling an Internet facsimile gateway device, comprising the steps of:
connecting to a telecommunication network and
20 the Internet;
transmitting image information included in an electronic mail message to a facsimile device when receiving said electronic mail message requesting image-information transmission to the facsimile device;
25 creating a delivery-confirmation mail message

notifying a result of the image-information transmission after completing the image-information transmission, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-
5 confirmation mail message to an original address of said electronic mail message; and
transmitting the delivery-confirmation mail message to the original address of said electronic mail message.

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30. The method of controlling the Internet
15 facsimile gateway device as claimed in claim 29, wherein the delivery-confirmation mail message is regulated by a DSN, said method comprising the step of creating the delivery-confirmation mail message regulated by the DSN notifying a successful image transmission after the
20 image-information transmission by said Internet facsimile gateway device is succeeded, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the DSN notifying the
25 successful image transmission to the original address of

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said electronic mail message.

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31. The method of controlling the Internet facsimile gateway device as claimed in claim 29, wherein the delivery-confirmation mail message is regulated by the DSN, said method comprising the step of creating the
10 delivery-confirmation mail message regulated by the DSN notifying a failed image transmission after the image-information transmission by said Internet facsimile gateway device is failed, if said electronic mail message requests said Internet facsimile gateway device
15 to transmit the delivery-confirmation mail message regulated by the DSN notifying the failed image transmission to the original address of said electronic mail message.

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32. The method of controlling the Internet facsimile gateway device as claimed in claim 29, wherein
25 the delivery-confirmation mail message is regulated by a

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MDN, said method comprising the step of creating the delivery-confirmation mail message regulated by the MDN notifying the successful image transmission after the image-information transmission by said Internet facsimile gateway device is succeeded, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the successful image transmission to the original address of said electronic mail message.

33. The method of controlling the Internet facsimile gateway device as claimed in claim 29, wherein the delivery-confirmation mail message is regulated by the MDN, said method comprising the step of creating the delivery-confirmation mail message regulated by the MDN notifying the failed image transmission after the image-information transmission by said Internet facsimile gateway device is failed, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the failed image

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transmission to the original address of said electronic
mail message.

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34. The method of controlling the Internet
facsimile gateway device as claimed in claim 29, wherein
the telecommunication network is a general switched
10 telephone network GSTN, said method comprising the step
of connecting to the general switched telephone network
GSTN and the Internet.

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35. The method of controlling the Internet
facsimile gateway device as claimed in claim 29, wherein
the telecommunication network is an analog public
20 network PSTN, and the facsimile device is a G3 facsimile
device, said method comprising the steps of:
connecting to the analog public network PSTN
and the Internet; and
exchanging the image information with the G3
25 facsimile device through the connected analog public

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network PSTN.

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36. The method of controlling the Internet facsimile gateway device as claimed in claim 29, wherein the telecommunication network is an integrated services digital network ISDN, and the facsimile device is a G4 facsimile device, said method comprising the steps of:
10 connecting to the integrated services digital network ISDN and the Internet; and
exchanging the image information with the G4 facsimile device through the connected integrated
15 services digital network ISDN.

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37. The method of controlling an Internet facsimile gateway device as claimed in claim 29, said method comprising the step of creating the delivery-confirmation mail message that notifies the result of the image-information transmission, said result
25 including reception ability information of the facsimile

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device received therefrom, after completing the image-information transmission if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message to the
5 original address of said electronic mail message.

10 38. A method of controlling an Internet facsimile gateway device, comprising the steps of:
 connecting to a telecommunication network and the Internet;
 transmitting image information included in an
15 electronic mail message to a facsimile device after receiving said electronic mail message requesting image-information transmission to the facsimile device;
 creating a first delivery-confirmation mail message notifying a successful transmission of said
20 electronic mail message to said facsimile device, after receiving said electronic mail message if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message to an original address of said electronic
25 mail message;

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transmitting the first delivery-confirmation mail message to the original address of said electronic mail message;

creating a second delivery-confirmation mail
5 message notifying a result of the image-information transmission by said Internet facsimile gateway device to the facsimile device after said image-information transmission; and

transmitting the second delivery-confirmation
10 mail message to the original address of said electronic mail message.

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39. The method of controlling the Internet facsimile gateway device as claimed in claim 38, wherein the first delivery-confirmation mail message is regulated by a DSN, and the second delivery-confirmation mail message is regulated by the DSN, said method comprising the step of creating the second delivery-confirmation mail message regulated by the DSN notifying a successful image transmission after the image-information transmission by said Internet facsimile gateway device is succeeded, if said electronic mail

message requests said Internet facsimile gateway device
to transmit the delivery-confirmation mail message
regulated by the DSN notifying the successful image
transmission to the original address of said electronic
5 mail message.

10 40. The method of controlling the Internet
facsimile gateway device as claimed in claim 38, wherein
the first delivery-confirmation mail message is
regulated by the DSN, and the second delivery-
confirmation mail message is regulated by the DSN, said
15 method comprising the step of creating the second
delivery-confirmation mail message regulated by the DSN
notifying a failed image transmission after the image-
information transmission by said Internet facsimile
gateway device is failed, if said electronic mail
20 message requests said Internet facsimile gateway device
to transmit the delivery-confirmation mail message
regulated by the DSN notifying the failed image
transmission to the original address of said electronic
mail message.

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41. The method of controlling the Internet facsimile gateway device as claimed in claim 38, wherein the first delivery-confirmation mail message is regulated by a MDN, and the second delivery-confirmation
5 mail message is regulated by the MDN, said method comprising the step of creating the second delivery-confirmation mail message regulated by the MDN notifying the successful image transmission after the image-information transmission by said Internet facsimile
10 gateway device is succeeded, if said electronic mail message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the successful image transmission to the original address of said electronic
15 mail message.

20 42. The method of controlling the Internet facsimile gateway device as claimed in claim 38, wherein the first delivery-confirmation mail message is regulated by the MDN, and the second delivery-confirmation mail message is regulated by the MDN, said
25 method comprising the step of creating the second

delivery-confirmation mail message regulated by the MDN notifying the failed image transmission after the image-information transmission by said Internet facsimile gateway device is failed, if said electronic mail
5 message requests said Internet facsimile gateway device to transmit the delivery-confirmation mail message regulated by the MDN notifying the failed image transmission to the original address of said electronic mail message.

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43. The method of controlling the Internet
15 facsimile gateway device as claimed in claim 38, wherein the telecommunication network is a general switched telephone network GSTN, said method comprising the step of connecting to the general switched telephone network GSTN and the Internet.

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44. The method of controlling the Internet
25 facsimile gateway device as claimed in claim 38, wherein

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the telecommunication network is an analog public network PSTN, and the facsimile device is a G3 facsimile device, said method comprising the steps of:

- connecting to the analog public network PSTN
- 5 and the Internet; and
- exchanging the image information with the G3 facsimile device through the connected analog public network PSTN.

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45. The method of controlling the Internet facsimile gateway device as claimed in claim 38, wherein
15 the telecommunication network is an integrated services digital network ISDN, and the facsimile device is a G4 facsimile device, said method comprising the steps of:

- connecting to the integrated services digital network ISDN and the Internet; and
- 20 exchanging the image information with the G4 facsimile device through the connected integrated services digital network ISDN.

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